

# California Energy Action Plan

## *Goal V: Promote Customer And Utility Owned Distributed Generation*

### **STATUS REPORT**

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**September 8, 2004**

# California Energy Action Plan

## EAP Goals for DG

- Adopt policies to promote DG
- Develop equitable rate treatment for costs associated with Department of Water Resources power purchases.
- Determine costs and benefits of DG.
- Standardize definitions of eligible DG technologies across agencies to better leverage programs and activities that encourage DG.
- Collaborate with the Air Resources Board and other air quality agencies to integrate energy and air quality activities affecting DG.
- Target research and development, track market adoption, identify system impacts and examine issues associated with new technologies.

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## Joint Agency Coordination and Integration

Working together to build upon the successful distributed generation collaboration established in 1998.

- CEC strategic reports to Legislature (IEPR, others ) and program activities (PIER research, interconnection, others)
- CPUC proceedings in distributed generation and utility resource procurement

# **California Energy Action Plan**

## **Action Goals to Optimize Distributed Generation**

1. Oversee customer incentives for aggressive energy peak demand reduction.
2. Increase participation in net metering.
3. Incorporate DG into utility long-term resource plans.
4. Adopt rates and tariffs to reflect reduced grid use by DG customers.
5. Develop cost-benefit methodologies.
6. Consolidate DG data collection and availability processes.
7. Develop fair, consistent interconnection rules.
8. Assess viability of new DG technologies.

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## 1. DG Incentives

### Self Generation Incentive Program

- Phase 1 – 2001 through 2004
  - 24.2 MW Renewable DG
  - 47.9 MW fossil fueled cogeneration
  - 170 MW in the pipeline
- Phase 2 – 2005 through 2007
  - Develop emissions and efficiency standards required by Assembly Bill 1685.
  - CPUC to consider funding levels and incentive payments through 2007, evaluate program impacts: load reduction, utilization of waste heat, costs and benefits.

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## 2. Increase Participation In Net Metering

- CPUC-approved utility tariffs allow:
  - Net metered customers to pay the DWR surcharge and the public goods charge only for net consumption
  - Customers to net meter biogas digesters, and allow dairies to aggregate onsite load.
- New tariffs will soon be in place to allow fuel cell customers to participate in net metering
- CPUC will consider proposals to accommodate hybrid renewable/non-renewable systems

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## 3. Incorporate DG Into IOU Resource Plans

- CPUC directed IOUs to submit implementation plans to consider DG as an alternative to traditional distribution investments.
  - A CEC PIER partnership with Southern California Edison will develop and evaluate a bid solicitation process.
- IOUs must include a forecast of DG in long-term planning and procurement process.
- CEC PIER-funded research on DG grid effects is incorporated for public comments in CPUC and CEC rulemakings

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### **4. Adopt Rates and Tariffs To Reflect Levels of Grid Use By DG Customers**

- CPUC adopted standby rate policies whereby DG customers who do not require ongoing standby service will pay little or no standby charges.
- CPUC extended the PU Code 353.13 standby rate exemption for non-net metered renewable and clean cogeneration facilities under 5 MW until permanent rates are adopted.
- Permanent standby rates will be adopted by the end of the year in utility general rate cases.



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## 5. Develop Cost-Benefit Methodology

- Will allow agencies, utilities, and DG installers to assess economics of DG. Potential uses include:
  - Compare resource options as part of utility resource planning
  - Determine how to select among various DG technologies for incentives and other funding
  - Evaluation of DG project to postpone costly grid upgrades
  - Measure effectiveness of DG incentive programs
- Joint Agency cost-benefit workshop held on May 5, 2004.
- Coordinate with CPUC QF Avoided Cost proceeding.

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## 6. Consolidate DG Data Collection And Availability Processes

- Streamline utility reporting requirements for interconnection, net metering, and incentive data.
- CPUC will consider how to make DG data publicly available without compromising confidentiality.
- Public workshop in October will solicit workable solutions.

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## 7. Develop Fair, Consistent Interconnection Rules

- CEC opened its own investigation to provide policy and technical guidance on interconnection issues, such as:
  - Interconnection costs
  - Meter ownership
  - Dispute resolution process
  - Net metering for hybrid systems
  - Consistent application of rules among utilities
- CEC will utilize expertise of the Statewide Interconnection Working Group, and hold public workshops
- CEC recommendations to CPUC by February 2005

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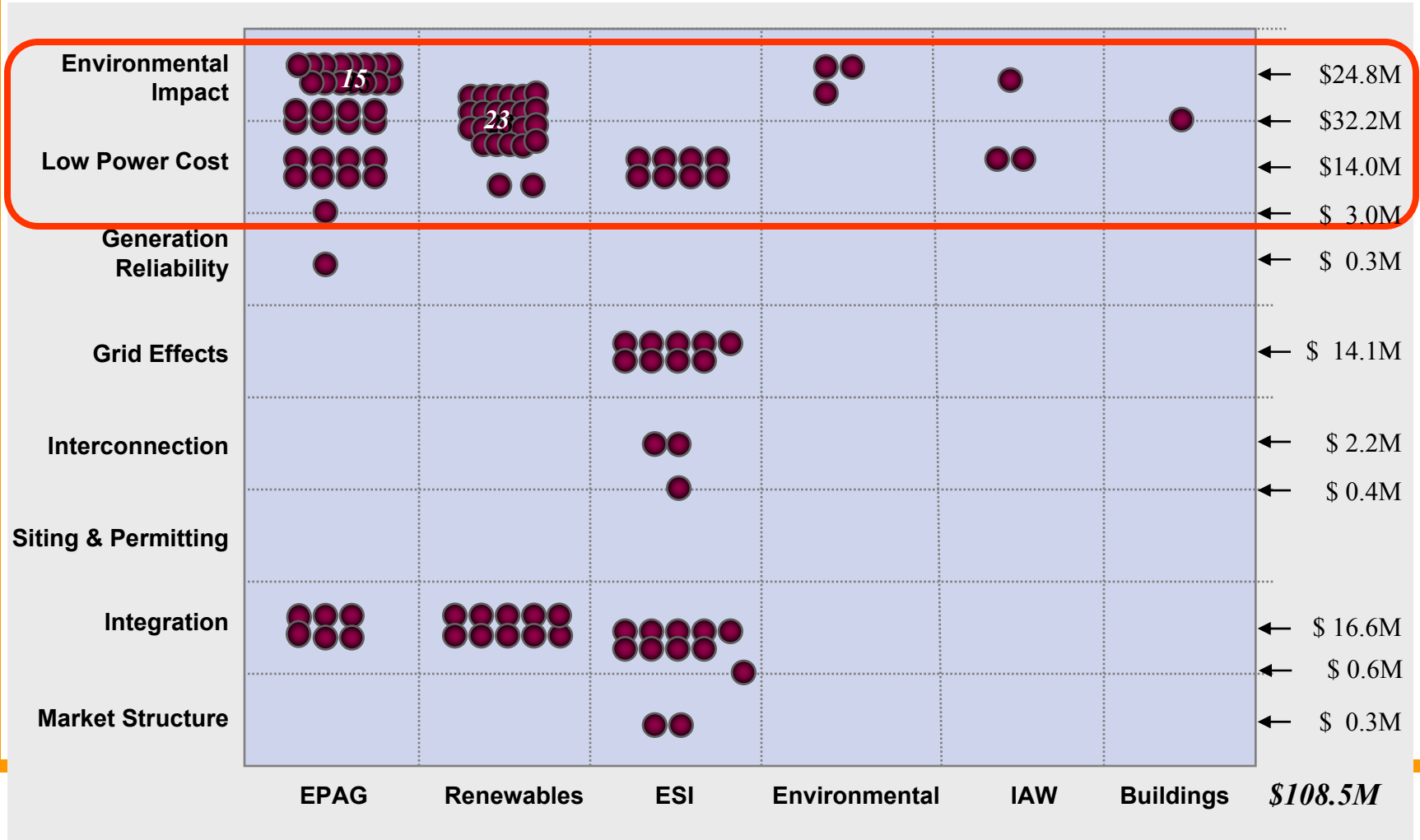
## 8. Assess Viability Of New DG Technologies

- Joint Agencies looking at how evolving DG technologies (fuel cells, microgrids, storage, stationary and mobile systems) could affect California's energy future.
- CEC-funded work on DG market transformation and related issues will inform CPUC's resource planning and procurement processes
  - CEC is managing a new PIER program which focuses on "pre-packaging" of cogeneration to reduce costs and improve environmental impact.

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## 8. Assess Viability Of New DG Technologies cont'd.

111 projects are DER related and total \$108.5M out of over \$324M in total PIER-funded R&D.



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## 8. Assess Viability Of New DG Technologies cont'd.

### Pacific Regional CHP Application Center

#### Mission

To promote CHP information exchange, education, and technical assistance in the Pacific Region (California, Nevada, Hawaii, and the Pacific Territories)

#### Partners

UC Berkeley, UC Irvine, and San Diego State Univ.

#### Activities

Education & Outreach

Identify and Facilitate High Impact Projects

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# California Energy Action Plan

## Conclusion

- Joint agency participation has been highly effective in coordinating resources and collaborating on program goals and strategies
- Agencies are moving expediently to meet the Energy Action Plan's goals